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DEPARTMENT OF THE ARMY FIELD MANUAL

SIGNAL CORPS PICTORIAL OPERATIONS

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HEADQUARTERS, DEPARTMENT OF THE ARMY

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SIGNAL CORPS
PICTORIAL OPERATIONS

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CHAPTER 1

INTRODUCTION

1. Purpose

This manual is a guide for all personnel engaged in providing signal corps pictorial services for army operations. It is also designed to provide information on signal corps pictorial operations for the users of pictorial services.

2. Scope

This manual describes the types of military photography, pictorial units, pictorial operations, laboratory operations, film and equipment exchanges, and military television.

3. Mission

The basic mission of pictorial units is to support army operations with adequate and timely pictorial service.

4. Military Photography

Basically, military photography is the recording on film of still and motion pictures of terrain, objects, or actions. These may be classified as follows:

a. Reconnaissance. Reconnaisance photography provides pictorial recordings to supplement or support reconnaissance missions. (Only ground reconnaissance photography is included in pictorial operations and is, therefore, covered in this field manual.)

b. Intelligence. Intelligence photography is a pictorial recording service furnished or requested in support of tactical, strategic, or technical intelligence requirements.

c. Psychological Operations. Psychological operations photography is the provision of photographs suitable for use in printed propaganda media.

d. Operational Record. Operational record photography is the production of photographs for use as a graphic record of military activities in both combat and rear areas. This type of photography provides photographs for historical purposes, for use in historical publications, and for command reports. Many photo-

graphs, planned originally for tactical or intelligence purposes, may be used as operational record photographs.

e. Information Photography. Information photography is the pictorial coverage of newsworthy subjects. Prints are produced for release to public news and information agencies.

f. Miscellaneous. Miscellaneous photography includes all other kinds of military photography, such as accident, medical, training, and identification photography.

5. Laboratory Processing

Laboratory processing includes the development of films, making of prints, maintenance of unit files, and transmittal of negatives to higher headquarters.

6. Film and Equipment Exchanges

Film and equipment exchanges procure, store, maintain, and lend projection equipment and military films to army units in specified areas. The various classes and types of film and equipment exchanges designated to accomplish this pictorial service in a theater of operations and in the continental United States (CONUS) are discussed later in this manual.

7. Military Television

Television, an electrical means of communication, is utilized to transmit audible and visual signals simultaneously. Through television, pictorial information, both live action and film, complete with sound, may be conveyed instantaneously from a common source to audiences in widely dispersed locations.

CHAPTER 2

TYPES OF MILITARY PHOTOGRAPHY

Section I. RECONNAISSANCE PHOTOGRAPHY

8. General

Ground reconnaissance photography is performed by photographers of the signal corps pictorial service units. Aerial combat surveillance photography is accomplished by army aviation units. Aerial reconnaissance photography is furnished by supporting Naval and Air Force units (figs. 1 and 2).

9. Ground Reconnaissance Photography

Ground photography includes, but is not limited to, detailed pictorial recording of ground reconnaissance missions, terrain features, and tactical operations. This type of tactical ground photography provides pictorial recordings to supplement or support observations during ground reconnaissance missions. Photographs of terrain features provide pictorial recordings that amplify, clarify, or pinpoint bridges, bridge approaches, river fords, roads, obstacles, or other terrain features. These photographs (fig. 3) are extremely useful in supplementing existing information with more specific detail.

10. Aerial Photography

Aerial photography is not included in signal corps pictorial operations. Aerial photography is covered in appropriate training publications.

11. Combat-Action and After-Action Photography

a. Combat-action photography is the pictorial recording of a military operation from start to finish. It includes complete coverage of all phases of combat activity.

b. After-action pictorial coverage is used to reveal the effectiveness of weapons and tactical operations against the enemy's defenses. It may also be used to provide pictorial coverage of reclamation and rehabilitation work.

Figure 1. Aerial Reconnaissance photography.

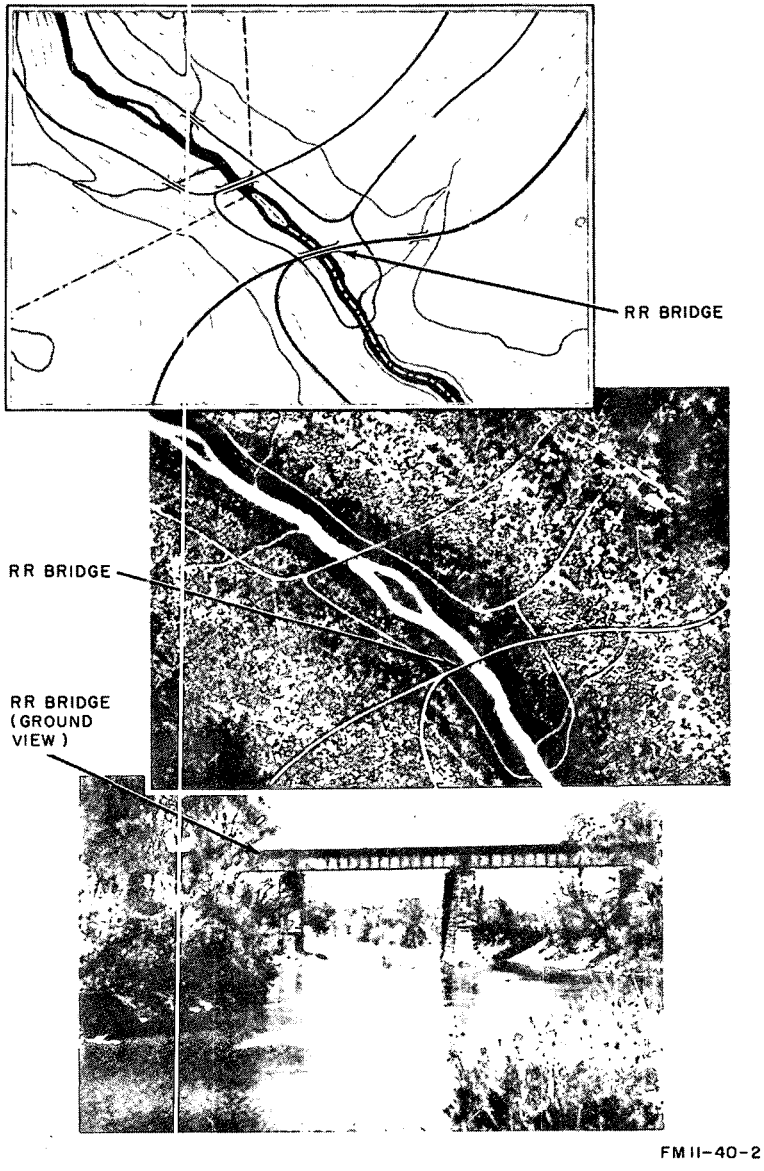

Figure 2. Aerial and ground views supplementing map.

Figure 3. Details of reverse slope, showing terrain conditions.

12. Ground Reconnaissance Photography Procedure

a. This type of photography concerns itself with subjects of immediate interest and importance; therefore, the time element cannot be overemphasized. The speed with which the finished photograph comes into the hands of the requesting agency determines the actual value of the entire photographic effort.

b. The requesting unit selects the photographic targets, specifies the type of information desired, and indicates the number of prints required. The requesting unit submits the request through intelligence channels to the level having a ground reconnaissance photographic capability. Following review and approval by the Intelligence Section, the request is forwarded to the staff signal officer for action. The pictorial officer develops the plan for the mission and briefs the photographer. The photographer completes the mission and delivers the exposed film to the laboratory by the fastest means. The completed prints are forwarded directly to the requesting agency.

Section II. INTELLIGENCE PHOTOGRAPHY

13. General

Intelligence photography includes general intelligence photography, strategic intelligence photography, and technical intelligence photography. It is always accomplished in response to requests from intelligence agencies, and normally is executed under the general or close supervision of appropriate military intelligence or technical intelligence personnel.

14. General Intelligence Photography

General intelligence photography is limited to pictorial services required by activities of the G2 section. Individual assignments include the pictorial recording of prisoners of war, the reproduction of enemy documents, and the detailed coverage of captured enemy installations.

a. Prisoner-of-War Photographs. This is a specialized kind of intelligence photography, intended primarily to give pictorial information on captured enemy soldiers. Also included in this type of photography is the pictorial recording of terrain where the enemy soldier or officer was captured. Such pictorial data supplements maps and is helpful to the interrogator in determining the actual location of enemy units, emplacements, and weapons.

b. Reproduction of Enemy Documents. Included in the category of enemy documents are orders, instructions, maps, photographs, reports, or papers found on captured enemy personnel or

in abandoned enemy positions, headquarters, or government offices. Qualified intelligence personnel are capable of establishing the importance of enemy documents and authorizing their photographic reproduction.

c. Captured Enemy Installations. Captured military installations are generally covered by routine operational record photography. Thus, if an intelligence agency desires more than routine photographs, it must provide detailed information on the specific coverage desired.

15. Strategic Intelligence Photography

a. Strategic intelligence photography has a wide scope, dealing exclusively with strategic subject matter. Coverage may include, but not be limited to, military geography (natural topographic features, manmade features, isolated features, vegetation, soil types, and climatic conditions); sociological intelligence (cities, towns, customs, and people); political intelligence (political events and activities, political organizations, and political personalities); economic intelligence (industry, natural resources, transportation systems and facilities, roads and highways, construction, communication facilities, storage facilities, and logistical capabilities); scientific intelligence (laboratories, test sites, equipment, products, methods, and personalities); and armed forces intelligence (military installations, military weapons and equipment, logistical operations, and military morale and discipline).

b. Signal corps pictorial operations support the overall strategic intelligence effort as directed. In addition, whenever a pictorial mission incidentally produces pictorial recordings of strategic value, the pictorial officer points out the potential value of the material to the appropriate signal officer. The signal officer, in turn, informs G2 on the availability of such material.

16. Technical Intelligence Photography

a. Technical intelligence photography is the pictorial recording of enemy and foreign military activities of interest to our technical services. Pictorial recordings of captured enemy equipment (fig. 4) and weapons, for example, reveal much about enemy capabilities and the enemy logistical situation.

b. Technical intelligence photography, as performed by signal photographers, is concerned primarily with subject matter pertinent to tactical operations. However, when time permits, these photographers may assist technical intelligence personnel of all technical services in producing necessary pictorial records.

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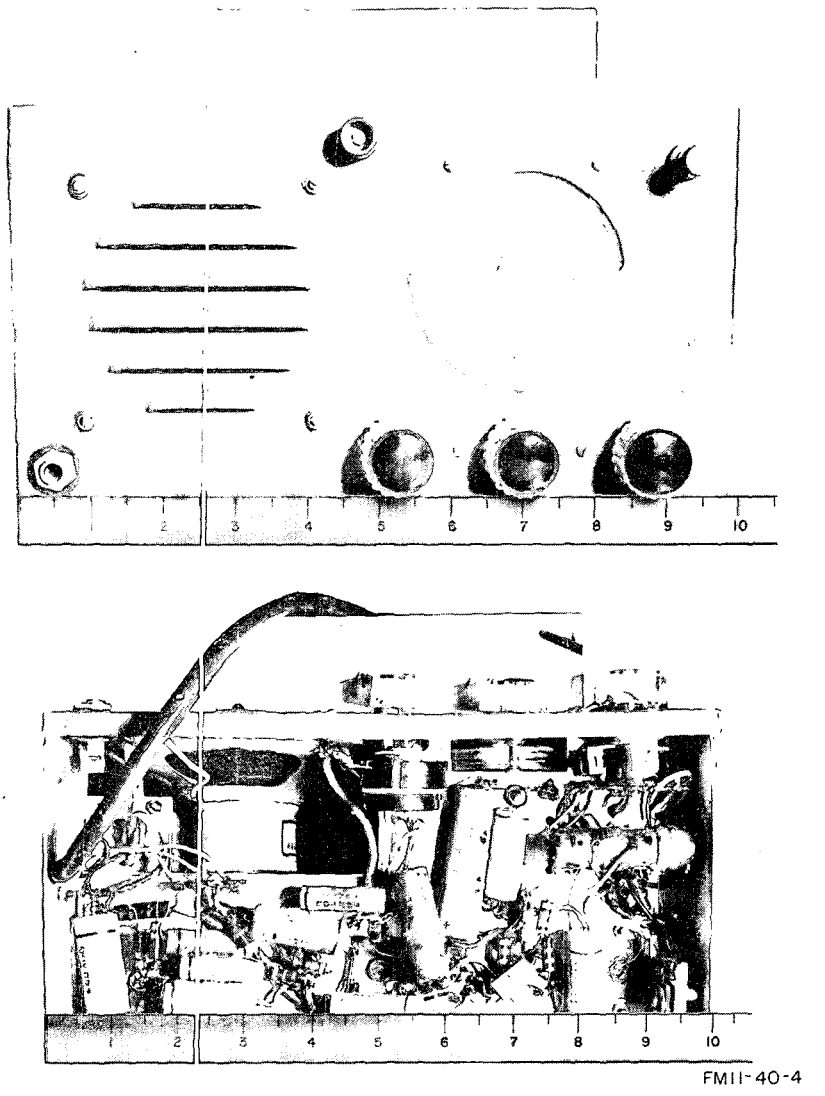

Figure 4. Technical intelligence photography.

17. Intelligence Photography Procedure

a. Requests. Requests for intelligence photography are directed to the G2 of the headquarters concerned or are prepared by the G2. Personnel within the G2 section screen these requests in order to eliminate duplication and to establish priorities. Upon completion of this screening, approval requests are forwarded to the signal officer.

b. Coordination. Prior to assignment of a photographer to a pictorial mission, the pictorial officer and the intelligence personnel concerned, discuss the coverage required. This permits the pictorial officer to determine the type of photography expected, and enables him to give applicable instructions to his photographers.

c. Processing and Print Preparation. Processing and print preparation at the division, corps, and field army levels are performed by the mobile laboratory of the pictorial unit concerned. At theater level, processing and print preparation are handled by the theater laboratory service unit. The number of prints to be prepared depends on the requirements of the using unit. This number varies with each assignment and is based on the nature of the assignment and the use of the prints.

d. Print Distribution. Normally, completed prints are distributed by G2. However, when speed is essential, the pictorial laboratory may distribute the prints directly to the requesting agency.

Section III. OPERATIONAL RECORD PHOTOGRAPHY

18. General

Operational record photography is the pictorial recording of military operations in both combat and rear areas (fig. 5). In this type of pictorial recording, special consideration is given to the conditions under which various incidents occur, and the extent to which our troops are influenced by them, either directly or indirectly. Thus, many photographs that initially serve as reconnaissance or intelligence pictorial recordings eventually become operational record photographs. When additional operational record pictorial coverage is required, requirements are established by the G3 and furnished to the signal officer. The appropriate pictorial unit provides the service.

19. Control of Coverage

Operational record photographic coverage includes the activities of each unit before, during, and after action. The signal officer

Figure 5. Operational record photography.

and the pictorial officer maintain close liaison with other staff sections to insure adequate operational record photographic coverage. The pictorial officer is responsible for complete coverage of the activities of a unit regardless of specific requests. This procedure insures a complete operational record of the unit concerned.

20. Pictorial Coverage

In intelligence and ground reconnaissance photography, primary importance is given to production speed. In operational record photography, primary importance is attached to completeness of coverage; production speed is of secondary importance. Thus, the pictorial officer can utilize both still and motion picture photographers to produce effective pictorial records of military units and operations. The pictorial officer insures complete coverage by assigning some of his photographers to record specific subjects, others to cover the activities of designated units, and the remaining photographers to cover, on a roving assignment basis, the activities in a designated area.

Section IV. PSYCHOLOGICAL OPERATIONS PHOTOGRAPHY

21. General

There is a continuing requirement for photographs to be used in printed propaganda media. In time of war such printed media as leaflets, newssheets, and posters will be disseminated to enemy, neutral, and friendly foreign target audiences. The following types of photographs will enhance the credibility of printed propaganda materiel:

a. Enemy prisoners of war or refugees being given humane treatment such as good food and shelter, and medical treatment. This is a testimonial type photograph.

b. Evidence of friendly superiority in food, clothing, weapons, ammunition, tanks, vehicles, aircraft, missiles, and other materiel.

c. Photographs obtained from enemy sources which would tend to place the enemy leaders or situation in a bad light.

d. Aerial photos showing destruction of enemy installations such as fortifications, cities, factories, and lines of communications.

e. Evidence of friendly guerrilla warfare and other unconventional warfare activities behind enemy lines.

f. Photographs showing unpatriotic behavior on the part of enemy civilians.

g. Photographs showing scenes of reconstruction and rehabilitation of installations and people in war devastated areas under friendly control.

22. Psychological Operations Photography Procedure

Psychological operations units and staff personnel submit requests for photographs of the type described in paragraph 21, to the G3 for approval. Requests are reviewed within the G3 section and approved requests are referred as follows. Approved requests for aerial photographs are referred to the G2. Appoved requests for photographs other than aerial photographs are forwarded to the signal officer for action. The pictorial officer coordinates with the psychological operations staff officer in the G3 section and with the psychological operations unit concerned prior to accomplishment of the pictorial mission. The provisions of paragraph 17*c* apply to the processing and preparation of prints of psychological operations photography. Prints may be distributed directly to the psychological operations unit concerned.

Section V. INFORMATION PHOTOGRAPHY

23. General

Information photography (fig. 6) is the pictorial coverage and recording of military activities and events of local and national interest. These pictorial recordings are intended for release to news and information agencies for dissemination to the public and to troops. Pictorial officers must always be on the alert for photographic stories in which, to the best of their knowledge, information officers will be interested. Pictorial coverage of these stories should be coordinated with the information officer. He is the only officer authorized to release photographs for public information purposes.

24. Coverage

Information media have particular requirements for pictures showing action. Pictures of individuals or units in training, in combat, on the job, in sports, or participating in other unit or installation activities, are particularly useful. Photographs should be informal, unposed, and realistic; they should help to tell a story. Close coordination between the information officer (or newspaper editor) and photographic personnel is essential in this type of coverage.

Section VI. MISCELLANEOUS PHOTOGRAPHY

25. General

Miscellaneous photography includes all military photography other than reconnaissance, intelligence, operational record, and information photography. Some of the categories of miscel-

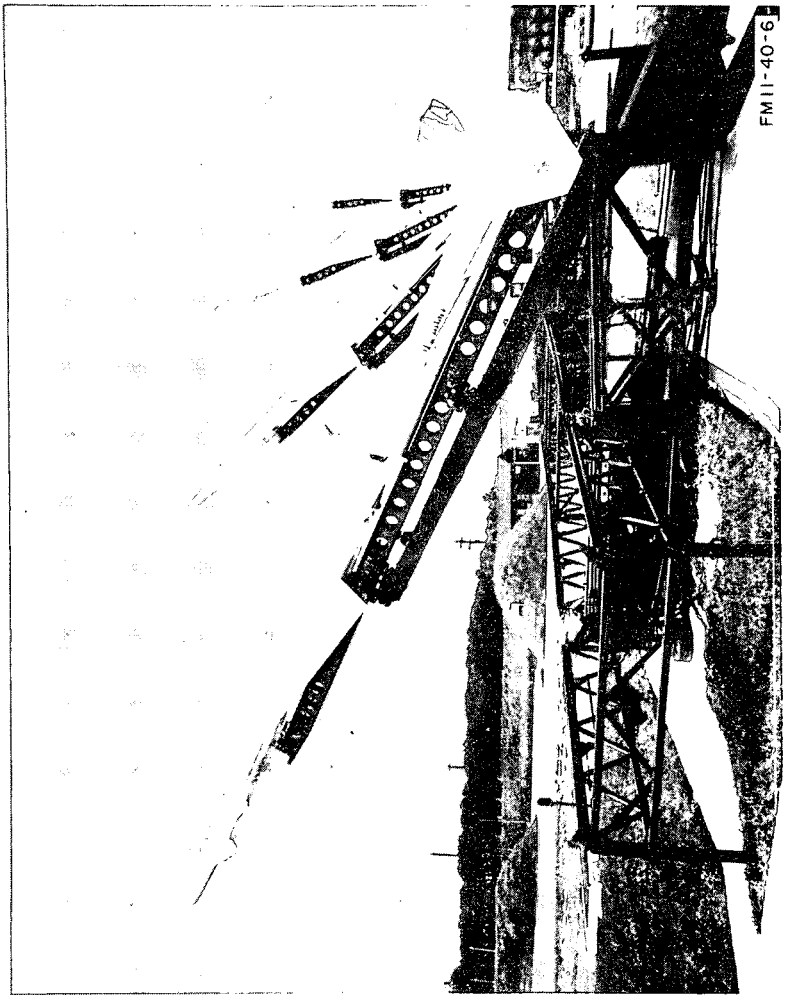

Figure 6. Information photography.

laneous photography are accident, medical, training, and identification photography.

26. Types of Miscellaneous Photography

a. Medical. The Medical Corps has its own specialists in medical photography who perform dermatological photography, recordings of specimens of all types and surgical procedures for various operations, records of autopsies, photomicrography, macrophotography, ultraviolet photography, and x-ray. Upon request, signal photographers give support to accomplishing this mission.

b. Training. Training photography includes pictorial coverage of personnel, equipment, and materiel for instructional purposes. Requests for such photographs usually include specifications or particular requirements.

c. Identification. Identification photographs are used on official passes, identification cards, and special military records. Photographs normally are obtained with standard type identification equipment.

d. Legal and Investigative. The judge advocate, the provost marshal, or the G2 section may require coverage of accidents and crimes—particularly war crimes—which ultimately may be used as legal evidence. Assignments of this type often consume considerable time, because of requirements for careful, detailed coverage. This type of photography can be completed most successfully when personnel of the requesting agency supervise the photographic coverage.

(1) Criminal investigation photography is normally performed by personnel under supervision of the provost marshal. However, signal photographers are often directed to prepare photographs to be used by criminal investigation agencies. Much care must be taken when making photographs that are to be used as evidence.

(2) The photographing of accidents is usually routine coverage of details relating to various types of accidents. In a theater of operations, this may range from enemy action and the careless handling of explosives and booby traps to automobile, railroad, aircraft, and other types of accidents. Coverage is normally specified by an investigating officer.

(3) Occasionally, counterintelligence agencies may request the services of signal photographers.

e. Graves Registration. Graves registration photography is used to record data that can be associated with identified or unidentified remains.

CHAPTER 3

PICTORIAL UNITS

Section I. GENERAL

27. Control

The primary mission of all pictorial units is to furnish the commander with complete pictorial coverage to assist him in accomplishing his operational mission. When so authorized by the commander, the signal officer normally exercises operational control over the assigned or attached pictorial unit.

28. Signal Officers

The signal officer at each echelon of command is responsible for planning a pictorial program suitable to the assigned missions of the command. He must anticipate the pictorial needs, coordinate his plans with other staff officers, and take steps to insure successful accomplishment of pictorial operations. The signal officer at each echelon of command has a pictorial officer in his staff section to advise him on pictorial operations. The signal officer will brief unit commanders and staff officers on the capabilities and limitations of the pictorial units, channels for requesting pictorial service, information required in requests, distribution of prints, restrictions on coverage, and security requirements.

29. Pictorial Officers

a. The pictorial officer at any echelon of command must be continuously alert to point out the potentials of the different phases of photography applicable to military operations.

b. At theater and field army level, the pictorial officer assists the signal officer in the exercise of operational control of the pictorial units when the signal officer is so authorized and advises the signal officer on pictorial operations matters. At corps and division level, the officer in charge (OIC) of the respective pictorial section also serves as advisor to the signal officer. The pictorial officer is responsible for the prompt, accurate, and complete execution of each assignment, the training of personnel, and the operations of the laboratory.

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Section II. DIVISION PICTORIAL UNIT

30. General

At division level, the pictorial unit is a section of the headquarters and headquarters company of the division signal battalion. This unit, which is under the supervision of a pictorial officer, provides still and motion picture coverage and laboratory services. The pictorial section is composed of still photographers, motion picture photographers, and laboratory specialists.

31. Employment

The primary mission of the division pictorial section is reconnaissance photography, but it also performs intelligence, operational record, public information, and miscellaneous photographic missions.

a. The still photographers handle reconnaissance and intelligence photographic missions.

b. The motion picture photographers concentrate their efforts on operational record and public information pictorial recordings.

c. Laboratory personnel process still pictures in a mobile laboratory. The processing of aerial film is done in one of the mobile laboratories, usually stationed at or near an army airfield.

Section III. CORPS PICTORIAL UNIT

32. General

At corps level, the pictorial unit is a section of the headquarters and headquarters company of the corps signal battalion. This unit, which is under the supervision of a pictorial officer, provides still and motion picture coverage and processes still photographs. This pictorial section has still picture photographers, motion picture photographers, and laboratory specialists.

33. Employment

The primary mission of the corps pictorial section is reconnaissance and intelligence photography, but it has fewer reconnaissance pictorial missions than the division pictorial sections. Motion picture photographers of the corps pictorial section provide the same coverage as motion picture photographers of the division pictorial sections. Laboratory personnel process still pictures in a mobile laboratory.

Section IV. ARMY PICTORIAL UNIT

34. General

At army level, the pictorial unit is a platoon of the headquarters

and headquarters company of the army signal battalion. This unit, which is under the supervision of a pictorial officer, provides still and motion picture coverage and processes still photographs.

35. Employment

The army pictorial platoon provides pictorial services for army troops. When directed by the army signal officer, it will perform all types of pictorial services within its capability in support of corps and division pictorial units. The laboratory section of the pictorial platoon provides central laboratory facilities for all pictorial units in the field army.

Section V. THEATER ARMY PICTORIAL UNITS

36. General

Pictorial service units are used at theater army headquarters and in the communications zone, to provide pictorial services. These units are organized and equipped in accordance with the pertinent table of organization and equipment (TOE).

37. Employment

a. The theater army pictorial service unit provides pictorial services for theater army headquarters. In addition, it supports the pictorial missions of pictorial units at lower echelons.

b. This unit operates the theater army central pictorial laboratory for army pictorial units in the theater. This laboratory processes still and motion picture film, both black-and-white and color.

c. Pictorial service units at logistical commands headquarters in the communications zone provide pictorial services for the headquarters to which assigned and for the units in the vicinity of the headquarters.

d. The theater army pictorial services unit operates the control film and equipment exchange service. It may establish subordinate exchanges at lower echelons.

Section VI. TRAINING

38. General

Continuous training of photographers and laboratory technicians is extremely important, in order to develop the skills required to produce high quality photographs.

39. Specialist Training

a. General. Pictorial specialists receive their training at Sig-

nal Corps schools. They ar eselected for this specialist training on the basis of previous experience and aptitude.

b. Photographers. When a photographer reports to his unit, specialist training continues in on-the-job instruction. School-learned principles of photography and camera operation must be related to military requirements. Critiques of finished photographs, conducted by the pictorial officer, will increase the photographer's ability to recognize the photographic possibilities in the subject matter of each request. He must learn to make sufficient exposures to provide desired detail, appropriate angles and perspective, and adequate coverage for such purposes as intelligence reports or terrain studies. He must develop confidence in taking action shots for reconnaissance photography. On-the-job experience will develop his skill not only in operating alone or working with other photographers as a team, but also in gaining the cooperation of personnel to be photographed.

40. Unit Training

Training within pictorial units is designed to increase the proficiency of individual specialists and to develop teamwork within the unit. Good unit training will produce a well-trained, well-coordinated pictorial unit.

a. Camera teams should be dispatched to cover the activities of other troops in training. This will provide both garrison and field assignments.

b. Laboratory sections can best be trained by following a training program that combines garrison and field training. Initially, the laboratory section should establish a base laboratory in garrison to service the camera teams in field training. Later, laboratory personnel should move to the field with portable equipment to service the camera teams in the field.

c. If possible, camera teams and laboratory personnel should be sent on detached service to a nearby installation or training area. This will give them experience in operating separately from their parent unit.

41. Training in Alternate Skills

All pictorial personnel should be proficient in at least two allied pictorial specialties. After an individual is qualified in one pictorial specialty, he should be given training in a second specialty. This cross-training is desirable because it insures a pool of ready-trained personnel to provide for unexpected personnel losses and workloads.

Section VII. SUPPLY AND MAINTENANCE

42. General

Supply procedures for pictorial supplies and equipment are essentially the same as those for other types of signal supplies. As in any supply operation, exact determination of overall requirements and careful, regular, requisitioning are essential. In some theaters of operation, local procurement of certain photographic items may be authorized.

43. Storage of Photographic Supplies

a. General. Special storage precautions are necessary for photographic supplies because such supplies are often perishable. Film, photographic paper, and chemicals must be stored in a cool, dry place. In addition, they should be stored in such a manner that the oldest stock is used first.

b. Labels. Each parcel containing film must show, on its exterior, whether the contents are exposed or processed. Identifying labels may be procured through normal supply channels.

c. Unexposed Film. Unexposed still and motion picture films usually are packed in containers that provide appropriate protection from climatic conditions; additional protection should be given by storing the containers in a cool, dry location. The ideal storage temperature for unexposed film is 60° F.; relative humidity should be between 40 and 60 percent.

d. Exposed Film. Normally, film is processed shortly after exposure. When immediate processing is not possible, exposed film must be stored at moderate temperatures to reduce the possibilities of emulsion deterioration, fungus, or mold. In addition, exposed film must be protected against hydrogen sulfide, coal gas fumes, motor exhausts, vapor from solvent materials, and radioactivity. Exposed still picture film should be placed in its original package and kept cool and dry until it can be developed. Exposed and unprocessed motion picture film may be placed in the original film can; however, the can should not be sealed airtight until the film has been thoroughly dried.

e. Other Supplies. Photographic papers normally are stored under the same conditions as unexposed film. They are stored at a distance from photographic chemicals and kept in sealed containers in a cool, dry location. Chemicals and other photographic supplies are stored in accordance with instructions printed on the labels of the containers.

44. Storage of Photographic Equipment

All photographic equipment must be cleaned and, where applicable, lubricated before storage. During storage, frequent inspections are necessary to check for the presence of rust, corrosion, fungus, or mold. When possible, equipment should be stored in a well-ventilated location that has a low relative humidity.

45. Maintenance of Photographic Equipment

a. Each pictorial unit is responsible for first and second echelon maintenance of its equipment. Those items requiring a higher echelon of maintenance will be evacuated to the appropriate signal maintenance shop.

b. Film and equipment exchanges have their own shop and are responsible for first, second, and third echelon maintenance of projection equipment.

CHAPTER 4

EMPLOYMENT OF PICTORIAL SERVICES

Section I. PICTORIAL COVERAGE

46. Normal Requests for Pictorial Coverage

Requests for pictorial services normally are forwarded to the pictorial unit through the signal officer. They should be submitted as early as possible to give the pictorial officer maximum time to plan the mission.

47. Special Requests for Pictorial Coverage

Higher headquarters usually direct requests for special pictorial coverage to the pictorial unit nearest the subject to be photographed. In some cases, higher headquarters may dispatch teams or units on special assignments into an area that is normally the responsibility of another unit. Commanders of these special units report to the signal officer of the command in whose area the unit will work. After completion of the mission, the officer in charge of the special pictorial unit will report to the signal officer of the command in whose area the unit has been working. In this report, he will indicate the pictorial coverage obtained in the area.

48. Pictorial Coverage

To insure adequate pictorial coverage, pictorial officers must consider all possible factors that could contribute to adequate and effective pictorial service. In this pictorial planning, the pictorial officer anticipates needs for photographs, coordinates with the unit or agency that initiated the request to determine the objective of the mission, and establishes procedures for its performance. This information, passed on to the photographer in the initial briefing, aids the photographer in accomplishing complete pictorial coverage and in preparing comprehensive captions.

49. Preparation for Mission

The amount of preparation and organization that goes into each mission governs the success of the mission. Routine photography follows a set pattern, established in the standing operating pro-

cedure (SOP) of the pictorial unit; special pictorial missions, based on specific written requests, invariably require more specific instructions. Upon receipt of an unusual mission, the pictorial officer determines how it should be performed. He then briefs the photographer.

50. Execution of Mission

The photographer should insure that lighting, camera angle, composition, background, and focus will direct the viewer's attention to the center of interest of the photograph. In addition, he should get as complete coverage as possible by taking distant views, medium views, and closeups.

51. Identification

a. Military photographers and Department of the Army civilian photographers must carry identification cards (DA Form 11–176). These are issued in accordance with AR 108–5. This card also will serve as a security clearance identification for the photographer.

b. Photographic personnel, while on assignment, wear a brassard which identifies them as photographers.

c. Accredited civilian photographers are sometimes authorized to obtain pictorial coverage of armed forces subjects. In such cases, they may request assistance from military pictorial units. Such assistance will be given if it does not interfere with the military pictorial mission.

d. The information officer is responsible for the general surveillance of activities of civilian photographers, and should clear civilian requests for assistance.

52. Captions

Every photograph must be given a clear, complete, and accurate caption that provides vital and significant facts on the subject matter of the photograph. Significant facts include the date of the photograph; the name of the photographer; the designation of the pictorial unit; full information on the personnel or subject material appearing on the print; and special instructions for developing the negative. The photographer writes this information on a caption data sheet, preferably at the time the film is exposed. He then forwards the caption data sheet and the exposed film to the unit laboratory.

53. Security Classification

The security classification of each pictorial mission will be determined by the requestor. This classification will be imprinted

on each negative and print, prepared or processed in the execution of the mission.

Section II. LABORATORY OPERATIONS

54. General

The laboratory that is organic to a tactical pictorial unit processes the still film exposed by camera teams of that unit. Processing includes development and printing of film, maintenance of unit files, and transmittal of film to higher headquarters. In some instances, the laboratory may perform portraiture, identification, and copy work.

55. Responsibility

The noncommissioned officer in charge (NCOIC) of a laboratory section is responsible to the pictorial officer for the work of his section. The functions of laboratories, regardless of size, are similar, varying primarily in the amount of work rather than the type of work.

56. Location

Laboratories should be located at points where they will have access to pickup and delivery service, either motor or air. Another important consideration in the location of a laboratory is the availability of water and power.

57. Equipment

a. At division, corps, and army, the pictorial laboratory is equipped with mobile laboratory facilities capable of processing still film and aerial rollfilm.

b. The theater army pictorial laboratory is the army central laboratory for the theater of operations. It can perform all work associated with the exposure and processing of still film. In addition, it has the photographers and technicians to expose, develop, project, and edit 16-mm and 35-mm motion picture film. This laboratory maintains the army central negative file in the theater of operations.

58. Black-and-White Photographs

Conventional black-and-white film processing produces a negative from which prints can be made in any quantity. Contact prints are used whenever possible, because enlargements greatly increase the production workload of a unit laboratory.

59. Color Photographs

Color photographic film processing is slower, more complex, and more expensive than black-and-white film processing. Color film normally is processed by the theater army pictorial laboratory.

60. Laboratory Security

The production of prints from negatives of classified material, equipment, and military activities must be in accordance with appropriate security regulations. Only the required number of prints is produced, and each print must be properly safeguarded during finishing and processing. Laboratory personnel place the proper markings on both photographic prints and negatives in accordance with the security classification established by the requestor.

61. Captions

Using the data provided by the photographer, laboratory personnel rewrite the final caption to accompany negatives and processed prints. In addition, laboratory personnel assign a file number to each photograph.

62. Negative Files

Each pictorial laboratory maintains negative files for the pictorial unit it serves. These files contain the negative, the file print, and the caption. Record negatives are periodically taken from these files and forwarded through channels for screening and forwarding to the Department of the Army. Negatives of local and temporary value are retained in the unit negative file.

Section III. UTILIZATION OF PHOTOGRAPHS

63. Policy

Pictorial services are of value to commanders at all echelons; therefore, major problems may arise when commanders of several echelons desire to make use of the same photographs concurrently. The guiding principle is that the best interests of the command are served when photographs are at the echelon having the major requirement. Photographs should be forwarded to the organization that made the original request. If other agencies or headquarters require the same coverage, prints or copies should be requested for their use.

64. Disposition of Photographs

a. Ground reconnaissance photographs normally are classified

as nonrecord material, and are retained by the originating unit as long as they are of tactical value. They are then forwarded through channels to higher headquarters.

b. Intelligence photographs, except those of purely local interest, are classified as record material. Laboratories prepare the required number of prints for local intelligence personnel and forward the original negatives to higher headquarters (through Signal Corps channels).

c. Operational record and public and troop information photographs, while of interest to local commanders, are generally of greater immediate usefulness to higher headquarters. Laboratories in the field make required prints from operational record and news negatives immediately, and forward the original negatives to the appropriate higher headquarters. They forward official photographs intended for public release to a public information officer or a censorship authority in accordance with appropriate directives.

d. Photographs selected for public information release will bear the following stamp on the back:

PUBLICATION OF THIS PHOTOGRAPH IS NOT AUTHORIZED UNLESS APPROVED FOR RELEASE BY A PUBLIC INFORMATION OFFICE AT ANY ARMY ACTIVITY OR INSTALLATION AND SO NOTED HEREON. THE DEPARTMENT OF THE ARMY HAS NO OBJECTION TO THE PUBLICATION OF THIS PHOTOGRAPH. ITS USE IN COMMERCIAL ADVERTISEMENT MUST BE APPROVED BY THE PUBLIC INFORMATION DIVISION, OFFICE OF THE CHIEF OF INFORMATION, DEPARTMENT OF THE ARMY, THE PENTAGON, WASHINGTON 25, D.C. IF PUBLISHED, PLEASE CREDIT "U.S. ARMY PHOTOGRAPH."

CHAPTER 5

FILM AND EQUIPMENT EXCHANGES

Section I. CONTINENTAL UNITED STATES

65. General

a. Army film and equipment exchanges are primarily responsible for providing audio-visual support to military units within a designated area which are engaged in the conduct of training, orientations, conferences, briefings, and any other activities which require the effective communication of ideas in group situations. Exchanges are established at selected posts, camps, and stations for servicing units of Active Army, Army Reserve, ROTC, and National Guard. In specific instances, films are loaned to civilian organizations.

b. Successful accomplishment of this support mission is dependent to a large degree upon the ability and efforts of key film and equipment personnel to actively promote improved utilization of audio-visual media among user units. Close coordination with the G3 and user units is required.

66. Functions

Army film and equipment exchanges requisition, store, maintain, and issue the various types of audio-visual media which include: 16-mm sound film; 35-mm filmstrips; 2 inches x 2 inches and 8 inches x 10 inches static transparencies; operable transparencies; phonograph and tape recordings; 16-mm sound, 35-mm strip, 2 inches x 2 inches and 3¼ inches x 4 inches slide, overhead, opaque projection equipment; recorder-reproducers; record players; projection screens; transparency reproduction equipment and materials; applicable running spare parts. In addition, the following services are developed and maintained:

a. Training and licensing of qualified projectionists.

b. Preparation and dissemination of information pertaining to the availability of audio-visual media.

c. Providing counsel and advisory assistance to training officers concerning utilization of audio-visual media.

d. Local preparation of materials for overhead projection, as requested.

e. Operation of adequate film preview facilities.

f. Development, appraisal, and possible incorporation of new audio-visual equipment, associated materials, and techniques.

67. Organization

a. Army film and equipment exchanges may vary in size, equipment, and personnel, depending on the number of troops served and the specific mission of these troops. Army film and equipment exchanges in CONUS are classified according to the following categories:

(1) Type A: A central Army film and equipment exchange that serves an army area.

(2) Type B: A film and equipment exchange that serves concentrations of division strength.

(3) Type C: A film and equipment exchange that serves from 7,500 to 10,000 troops.

(4) Type D: A film and equipment exchange that serves installations with less than 7,500 troops.

(5) Type EX: A special film and equipment exchange that is established at Class II installations to provide limited service.

b. These facilities may be expanded by the addition of personnel and equipment. They are then designated by an additional letter or letters. For example, a type BBB exchange is authorized three times the amount of equipment authorized to a B exchange. This increase may be authorized by the Chief Signal Officer upon request by the unit.

68. ZI Army Film and Equipment Exchange Services Directors

Directors of film and equipment exchange services in ZI armies are responsible to the army pictorial officer for broad programming, planning, and maintaining an aggressive program to insure that the area exchanges provide optimum support to training and information activities.

69. ZI Army and Post Film and Equipment Exchanges

Film and equipment exchanges are the basic working units of the film and equipment distribution system. Because of the amount of military training conducted in CONUS, one central film and equipment exchange is located in each ZI army area and where warranted, smaller exchanges are established upon the recommendation of the Army commander.

Section II. THEATER OF OPERATIONS

70. General

Army film and equipment exchanges provide army units in the theater of operations with 16-mm training films, information and education films, staff film reports, combat bulletins, reports to the armed forces, miscellaneous motion picture films, 35-mm filmstrips, slides, and all equipment necessary for projection.

71. Functions

The functions and services of Army film and equipment exchanges in the theater of operations parallel those of film distribution organizations in CONUS. The film and equipment exchange in a theater of operations assists in the proper use of projection equipment and projection methods, trains and licenses projector operators, and performs authorized maintenance of equipment.

72. Classes

The three classes of film and equipment exchanges in a theater of operations are classes A, B, and C, representing three sizes of organization (par. 65). The central film and equipment exchange is the distribution control point for all other film and equipment exchanges in a theater of operations.

CHAPTER 6

PICTORIAL OPERATIONS IN CONTINENTAL UNITED STATES

73. General

Pictorial service in CONUS is provided by pictorial laboratories and film and equipment exchanges located at posts, camps, and stations. These organizations are integral parts of the permanent station complement, and are under the control of the post signal officer.

74. Types of Photography

Army signal photography in CONUS consists primarily of operational record, public and troop information, and miscellaneous types of photography. Operational record photography is of particular importance because it provides an historical record of unit and installation operations.

75. Army Signal Officer

The operation of pictorial laboratories at class I installations and activities and film and equipment exchanges at installations and activities of all classes within an army area is a command responsibility of the army commander. He is assisted in this field by the army signal officer, who exercises staff supervision over all pictorial operations in the army area. The army signal officer, in turn, is assisted by an army pictorial officer.

76. Army Pictorial Officer

In each army area, a pictorial officer serves on the army signal officer's staff. The army pictorial officer formulates policies for laboratories and film and equipment exchanges, and supervises the execution of these policies. In addition to his staff duties, the army pictorial officer may also command an army regional pictorial laboratory or a regional film and equipment exchange.

77. Post Signal Officer

The size and nature of pictorial activities at a post, camp, or station are determined by the number of troops assigned to the installation and by the military mission of the installation. The post signal officer delegates control to a pictorial officer or, in a film and equipment exchange, to a qualified director.

CHAPTER 7

MILITARY APPLICATION OF TELEVISION

78. General

a. As a result of research and development in the military uses of television (TV), it has been determined that TV is an important means of communication with military applications. However, indiscriminate use of this medium is not advocated.

b. Commanders must consider many factors in justifying the installation and operation of TV facilities. They should evaluate the use of TV in each particular situation to determine if—

(1) The use of TV is practical.
(2) The result will be worth the cost involved.
(3) TV will simplify understanding of the specific problem involved.
(4) Sufficient trained personnel are available for TV operation and maintenance.
(5) The medium will interfere with, or be subject to interference from, other means of communication.

79. Responsibility

a. The Chief Signal Officer is responsible for television within the Army. He is responsible not only for the research and development of TV equipment and components for our forces, but also for devising procedures and equipment to be used against enemy television activities.

b. The Chief Signal Officer also formulates and maintains plans and programs and establishes budgets for the research and development of army TV systems, equipment, and components to be used for technical, tactical, training, and information purposes.

80. Training Application of Television

The widest application of television is being made by the army in the field of training, where it is anticipated that before long every major training activity will possess a TV facility. TV may be used to supplement or replace conventional instruction in a variety of training situations. For further information, see TM 11–491.

a. Although there are many thousands of hours of army train-

ing where conventional instruction will meet requirements more economically, television is unrivaled where there are shortages of instructors and/or training aids. By using TV to present lectures and demonstrations, one television instructor can reach hundreds or thousands of trainees as required. Also, one training aid or one piece of equipment can, over television, be used to train large numbers of men simultaneously.

b. The TV camera can magnify and show small parts of intricate equipment. It permits large groups of trainees to view field exercises and remote demonstrations. Television also is used to teach trainees various manual skills.

c. Records of live TV presentations can be made on film or video tape and stored for future use as needed. Such recorded lessons enable scheduling problems to be met with flexibility and provide a valuable library of training material for emergency or mobilization periods.

81. Other Uses

Television facilities can be used as a medium for mass communication in a variety of ways.

a. When a commander wishes, he can obtain immediate contact with his entire command by delivering his message over TV.

b. By using TV to present troop information and education programs, a few well-qualified instructors can take the place of dozens of less-qualified personnel.

c. Community antenna systems may be set up at army installations so that popular commercial programs may be received for recreation and entertainment purposes.

d. The Office of Armed Forces Information and Education, in cooperation with the Signal Corps, has established low-power TV stations in remote, oversea areas for the primary purpose of presenting popular entertainment. These stations may be used also for educational purposes.

APPENDIX

REFERENCES

AR 108–5	Still and Motion Picture Photography.
AR 108–6	Motion Picture Production.
AR 108–30	Operation of Signal Corps Film and Equipment Exchanges.
AR 108–38	Photographic Production Report (Reports Control Symbol SIG–17 (R2)).
AR 108–39	Film and Equipment Exchange Report (Reports Control Symbol SG–12 (R2)).
AR 108–40	Television.
AR 108–64	Handling and Distribution of Foreign Motion Picture Film.
AR 320–5	Dictionary of United States Army Terms.
AR 320–50	Authorized Abbreviations and Brevity Codes.
AR 380–5	Safeguarding Defense Information.
AR 606–5	Identification Cards, Tags, and Badges.
DA Pamphlet 108–1	Index of Army Motion Pictures, Film Strips, Slides, and Phono-recordings.
DA Pamphlet 310–1	Military Publications: Index of Administrative Publications. (Army Regulations, Special Regulations, Department of the Army Pamphlets, Commercial Traffic Bulletins, Military Traffic Management Bulletins, General Orders, Bulletins, and Circulars.)
DA Pamphlet 310–2	Military Publications: Index of Blank Forms.
DA Pamphlet 310–3	Military Publications: Index of Training Publications; Field Manuals, Reserve Officers' Training Corps Manuals, Training Circulars, Army Training Programs, Army Subject Schedules, Army Training Tests, War Department and Department of the Army Posters, and Firing Tables and Trajectory Charts.

DA Pamphlet 310–4	Index of Technical Manuals, Technical Bulletins, Supply Bulletins, Lubrication Orders, and Modification Work Orders.
DA Pamphlet 310–5	Military Publications: Index of Graphic Training Aids and Devices.
DA Pamphlet 310–7	Military Publications: Index of Tables of Organization and Equipment, Type Tables of Distribution, and Tables of Allowances.
DA Pamphlet 310–21	Military Publications: Index of Supply Manuals; Signal Corps.
FM 21–5	Military Training.
FM 21–6	Techniques of Military Instruction.
FM 21–30	Military Symbols.
TM 11–401	Elements of Signal Photography.
TM 11–491	Training by Television.

By Order of *Wilber M. Brucker*, Secretary of the Army:

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Chief of Staff.

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NG: State AG (3); units—same as active Army except allowance is one copy to each unit.

USAR: Same as Active Army except allowance is one copy to each unit.

For explanation of abbreviations used, see AR 320–50.

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